

HIGH FREQUENCY INDUCTION HEATER BUILT IN AN INJECTION MOLD

Abstract

A high frequency induction heater built in an injection mold. The high frequency induction heater has a metal or silicon mold-insert, at least a heating module and at least a thermometer detector. The elements are reasonably fit with the mold-insert utilizing well-defined MEMS technology and UV-LIGA process. The high frequency induction heater is employed to apply a local heat for a microstructure of mold-insert during the micro molding process. By using the high frequency induction heater a fluid mold flow and high aspect ratio replication is achieved.